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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,635	11/18/2003	Vladimir Nikolaevich Samofalov	P03.0239	4328
26574	7590	07/03/2008		
SCHIEF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			EXAMINER	
			BLOUIN, MARK S	
			ART UNIT	PAPER NUMBER
			2627	
			MAIL DATE	DELIVERY MODE
			07/03/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/715,635

**Applicant(s)**

SAMOFALOV ET AL.

**Examiner**

Mark Blouin

**Art Unit**

2627

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 7-11, 13-15, 17, 19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 11, 13-15, 17, 19 and 21 is/are allowed.
- 6) ☒ Claim(s) 2-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **Detailed Action**

### ***Response to Amendment***

- The reply filed on April 10, 2008 was applied to the following effect: Claim 2 is amended.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (JP 04-167207 A).
3. Regarding Claims 2-5 and 7-9, Inoue (Figs. 1 and 2) discloses a high gradient stray field magnetic field generator comprising: a magnetic flux circuit with a yoke (2, 2) having yoke surfaces, and a gap (6) in said yoke (2, 2) between said yoke surfaces that produces a magnetic field (magnetic field produced via coil winding (4) when energized); said gap having a gap width proceeding perpendicularly and an even number of permanent magnets (7a) disposed in said gap (6) (eight such magnets depicted in FIG. 1), forming at least one magnet pair (4 pairs depicted in FIG. 1 of Inoue), with the respective magnetizations (North-to-South magnetic pole orientations) of the permanent magnets (7a and 7a within each pair) in each magnet pair oriented oppositely to each other (e.g., see FIG. 1, wherein the topmost magnet (7a) is oriented with a North-to-South pole magnetization of (N-S) along the medium travel, and the adjacent magnet in direct contact therewith and just below, is oriented with a South-to-North pole magnetization of (S-N) along

the medium travel), and respectively having magnetization vectors each comprising a magnetization component perpendicular to said gap width, with substantially no separation between the permanent magnets (7a, 7a) in each pair, said permanent magnets (7a) producing a stray field that adds to said magnetic field (of the coil). That is, the some of the “magnetic flux generated in the gap at the time of recording or reproducing is bent perpendicularly by the same polarity repelling on the surfaces of the gap 6 to become a strong magnetic field of a perpendicular component.” This repulsion polarity clearly implies that the flux is additive in order to force the recording flux in a normal perpendicular fringing effect at the transducing gap.

*Allowable Subject Matter*

4. Claims 10,11, 13-15,17,19, and 21 are allowed.

*Response to Arguments*

5. Applicant's arguments filed April 10, 2008 have been fully considered but they are not persuasive. The Applicant asserts on page 16:

Claim 2 has therefore been amended to first define the gap having a gap width that proceeds perpendicularly between two yoke surfaces, and then the respective magnetization vectors of the magnetizations of the permanent magnets are stated to comprise magnetization components that are perpendicular to this gap width. Since the Inoue et al. reference, as described above, clearly discloses only magnets with magnetization vectors having components parallel to the gap width, the Inoue reference does not anticipate amended claim 2, nor either of claims 3 and 4 depending therefrom.

The Examiner maintains that the Abstract states “a magnetic flux generated in the gap at the time of recording or reproducing is **bent perpendicularly** by the same polarity repelling on the surfaces of the gap 6 to become a **strong magnetic field of a perpendicular component**.”

Therefore, the rejection of Claim 2 is upheld.

As to claim 9, that claim already states that the two permanent magnets are disposed in opposite sides of the write pole, and this means that, if a gap is present, the two permanent magnets are located outside of such a gap. The Inoue reference discloses only a structure wherein the magnets are located within the gap, and therefore does not anticipate claim 9.

The Examiner maintains that the write pole has two yokes (2,2) with faces that are opposite from each other (forming the gap 6) and the permanent magnets 7a are disposed in those opposite sides and fill gap 6. Therefore, the rejection of Claim 9 is upheld.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joe Feild, can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mark Blouin/

Primary Examiner of Art Unit 2627

Mark Blouin  
Patent Examiner  
Art Unit 2627  
July 1, 2008